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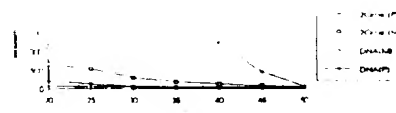
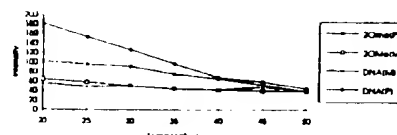
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(54) Modified nucleic acid probes

(57) Oligonucleotide analogue arrays attached to solid substrates and methods related to the use thereof are provided. The oligonucleotide analogues hybridize to nucleic acids with either higher or lower specificity than corresponding unmodified oligonucleotides. Target nucleic acids which comprise nucleotide analogues are bound to oligonucleotide and oligonucleotide analogue arrays.

213 DNA target on 30Mn/DNA 8 mer perfect (mismatch probe)
(1m equiv)

(10 min, 5x SSPE, 20°C-50°C, 90 min wait, bld, 15min)



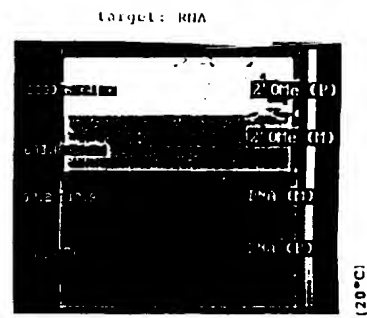
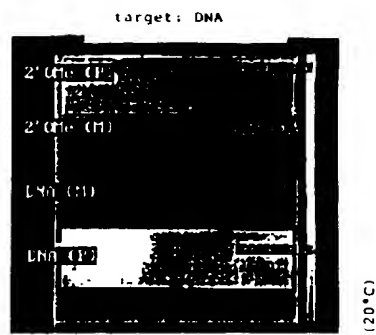


Figure 1B



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EUROPEAN SEARCH REPORT

Application Number

EP 96 30 3245

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	EP 0 535 242 A (INST MOLEKULARNOI BIOLOG IM V) 7 April 1993 * abstract; claims 1-6 * * figure 1 * ---	1-3,8-10	C12Q1/68 C07H21/00 B01J19/00
Y	WO 90 01564 A (MICROPROBE CORP) 22 February 1990 * abstract * * page 14, line 25 - line 28 * ---	1-3,5,8-10	
Y	PEASE A C ET AL: "LIGHT-GENERATED OLIGONUCLEOTIDE ARRAYS FOR RAPID DNA SEQUENCE ANALYSIS" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 91, no. 11, 24 May 1994, pages 5022-5026, XP000569532 * whole document * ---	4,6,7	
Y	WO 93 09668 A (AFFYMAX TECHNOLOGY N V) 27 May 1993 * claims 1,3,8 * ---	4	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
P,Y	WO 95 21265 A (ISIS INNOVATION ;SOUTHERN EDWIN MELLOR (GB); MIR KALIM ULLAH (GB);) 10 August 1995 * abstract; claims 1-5 * * figure 1 * ---	1-7	C12Q C07H
P,Y	EP 0 668 361 A (MITSUBISHI CHEMICAL CORP) 23 August 1995 * abstract * * Table 3 * * claims 1-4,9 * * page 2, line 26 - line 30 * * page 2, line 36 - line 41 * ---	2,3,5	
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The present search report has been drawn up for all claims			

153 440 700

- X particularly relevant if taken alone
- Y particularly relevant if combined with another document of the same category
- A technological background
- O non-written disclosure
- P intermediate document

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Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
E	WO 96 27680 A (BOEHRINGER MANNHEIM GMBH ;KLEIBER JOERG (DE); OERUM HENRIK (DK); L) 12 September 1996 * abstract; claims 1,5 *	1,6-10	
T	FIDANZA J A ET AL: "Oligonucleotide analog arrays for enhanced hybridization." ABSTRACTS OF PAPERS AMERICAN CHEMICAL SOCIETY 213 (1-3). 1997. ORGN 303. ISSN: 0065-7727, XP002042986 213TH NATIONAL MEETING OF THE AMERICAN CHEMICAL SOCIETY, SAN FRANCISCO, CALIFORNIA, USA, APRIL 13-17, 1997. * abstract *	1-10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
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E particularly relevant if taken alone
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 A technological background
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 P intermediate document

theory or principle underlying the invention
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 L document cited for other reasons
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